

ABSTRACTS

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T.O. Zagorna

INVESTIGATION OF THE COMPETITIVE PROCESS IN THE INDUSTRY: A SYNTHESIS OF FRACTAL CHARACTERISTICS AND PROCEDURES

Accelerating the pace of economic change and complexity nature of the relationship between subject's commodity markets is developing further development of the theory and methodology of the competitive advantages businesses. A more complicated situation appears to the formation of basic theory of competitive dynamics, as existing models and methods do not take into account the characteristics of the competitive process in the industry, the pace of change competitive positions competitor, and therefore require thorough analytical studies of the competitive process based on fractal characteristics and deepening procedures.

Practice shows that the economic processes and phenomena are not linear and often chaotic. The theory of fractals not only makes it possible to reveal the complex nature of the systems, interactions of structural elements, but also allows for a property market as self-organization. In this paper, a detailed analysis of prospects of using fractal statistics and fractal geometry in the study of complex phenomena; the characteristic parameter «fractal dimension», which makes it possible to assess the degree of uncertainty in the process of competitive interaction (at the market) and illustrates the evaluation of the potential of the network (at the level of competition participants). Self-similarity of fractals in some way blurs the line between participant behavior and the behavior of the system.

The study found a relationship between the level of uncertainty in the competitive environment and the parameters of its evaluation by the theory of fractals. This made it possible to go directly to the quantitative assessment of the competitive dynamics parameters (parameter estimation of *Herst* (H), the generation of time series change in competitive position using wavelet analysis).

